



TWO BAD ANTS by Chris Van Allsburg

Would this story discourage two adventurous children in your classroom? Can you blame them when they found a treat that was too good to be true? They had no idea of the dangers they would encounter when daylight came and the "alien world" came alive.

A magnifying lens allows students to observe an object more closely. If the lens is used to examine a large object, only part of the object can be seen. However, it can be seen in great detail. The field of view is defined as the space or area of the object that can be seen through the lens of a hand lens or a microscope.

The ant's field of view was limited and they didn't see the dangers of staying behind to eat their fill of sugar. They learned the hard way that it is best to follow directions and that there is no place like home!

This book can be used as a link to an introductory unit, *STC Microworlds™*, on microscopes. The book can introduce the unit or be used with activities throughout the unit. The first activity in the unit begins by asking the students to draw, from memory, a familiar object - both sides of a penny. After being allowed to look at the penny for one minute, they are asked to draw it again. Since the penny fits into the field of view of the hand lens, they can observe the penny for a third time and add more of the details they observe.

MATERIALS: Magnifying lenses, pennies, pencils, observation

ACTIVITY: Create an observation sheet divided in three sections for observing the penny. In each section provide two circles: one for heads AND one for tails.

1. Without looking a penny, draw a picture of what you remember on the heads and tails sides.
2. Look at a penny for one minute **with your pencils down on your desk**. Now put the penny down and draw, **from memory**, what you observed!
3. Now use a magnifier to observe the penny and draw it one more time.

SOURCE: Adapted from *STC™ MICROWORLDS*.

TEACHER NOTES: This is a great activity that can be used to involve adults at home.

Send an extra copy of activity sheet home so that students can ask their parents to test their memories.

STANDARDS:

BSL: 1.1, 1.3, 4.8, 12.8, 12.12

NCTM: 1b, 1 c, 2a, 4e, 10a, 10d

SCS: A1, H1, H2

Van Allsburg, Chris. Two Bad Ants. Houghton Mifflin Company, NY. c1988.
ISBN#0-395-48668-8.